

**Amendments to the Abstract**

Please substitute the paragraph presented on the next page for the abstract now appearing in the currently filed specification:

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**Abstract**

A microscope system includes at least one lens that defines an illumination field and at least one light source that emits an illuminating light beam for illuminating a specimen through the lens. At least one detector is provided for, pixel-by-pixel, detecting a detection light beam coming from the specimen. An electronic circuit is connected downstream from the detector, the electronic circuit including a memory unit for storing a wavelength-dependent brightness distribution of an illumination field of the at least one lens. The electronic circuit employs, pixel-by-pixel, the stored wavelength-dependent brightness distribution so as to form a homogeneously illuminated image field. An actuatable element is provided for controlling, pixel-by-pixel, an intensity of the illuminating light beam as a function of the stored wavelength-dependent brightness distribution so as to homogeneously illuminate the illumination field.